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Appeal Brief Under 37 C.F.R. §41.37 (50 sheets)
Claims Appendix (7 sheets)
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Declaration Under 37 CFR 1.132 (8 sheets)
Related Proceedings Appendix (1 sheet)
Fee Transmittal Form (PTO/SB/17) (1 sheet)
Credit Card Payment Form (PTO-2038) (1 sheet)

Application Number   10/666,227   Art Unit: 2178
Confirmation No.:   8462   Examiner: Termanini, Samir
Filing Date: 18 September 2003   Inventor: Poerner, Colleen
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23 Dec 2008   Kelly B. Smoker   _Kelly B. Smoker_
.Date   Name of Certifier   Signature of Certifier

PATENT

Application 10/666,227

Attorney Docket 2002P15657US01 (1009-040)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	**Poerner, Colleen**
Application	**10/666,227**
Confirmation	**8462**
Filed	**18 September 2003**
Application Title	**System and Method for Navigating an HMI**
Art Unit	**2178**
Latest Examiner	**Termanini, Samir**

Mail Stop Appeal Brief-Patents

Commissioner for Patents

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APPEAL BRIEF UNDER 37 C.F.R. §41.37

Sir:

Applicant respectfully submits this Appeal Brief in response to the Office Action of 10 July 2008 ("the present Office Action") rejecting each of the pending claims 1-40. This Appeal Brief is in furtherance of the Notice of Appeal filed on 18 October 2008.

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Application 10/666,227

Attorney Docket 2002P15657US01 (1009-040)

I.   REAL PARTY IN INTEREST

The real party in interest is Siemens Energy & Automation, Inc., a corporation having a place of business at 3333 Old Milton Parkway, Alpharetta, GA 30005.

II.   II.   RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III.   III.   STATUS OF CLAIMS

Claims 1-40 are pending in this application, have been twice rejected.   Each of claims 1-41 are the subject of this appeal. Each of claims 1, 33, 34, and 40 are in independent form.

IV.   STATUS OF AMENDMENTS

Claim 41 was added after the Final Office Action, and was entered into the record on 10 September 2008.

V.   SUMMARY OF CLAIMED SUBJECT MATTER

All citations herein regarding the present application reference the application as originally submitted.

Independent Claim 1

Independent claim 1 recites a method that comprises providing an HMI screen navigation editor to a user (see at least Fig. 3, activity 3100; page 3, lines 13-14; page 6, lines 6-7; and page 12, lines 1-11). The method further comprises via the HMI screen navigation editor, enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes (see at least Fig. 3, activity 3200; page 3, lines 14-16; page 6, lines 7-9; and page 12, lines 13-30). The method further comprises responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with

respect to each child node of said plurality of child nodes a determined collision with said child node (see at least page 16, line 17 – page 17, line 7). The method further requires that the determined collision is determined based upon said adjusted position of said parent node and a calculated position of said child node (see at least page 16, line 17 – page 17, line 7). The method further comprises rendering the collection to the user (see at least Fig. 3, activity 3400; page 3, lines 16 and 21-22; page 6, line 9; page 14, lines 1-8; page 11, lines 20-30; and page 17, lines 2-4).

Dependent Claim 2

To independent claim 1, claim 2 adds that the method further comprises receiving from the user a specification of an HMI root screen node (see at least Fig. 3, activity 3200; page 11, lines 2-29; page 12, lines 1 - page 13, line 12; and page 18, lines 2-7).

Dependent Claim 3

To independent claim 1, claim 3 adds that the method further comprises receiving from the user a specification of an HMI child screen node, the HMI child screen node a descendent of an HMI root screen node (see at least Fig. 3, activity 3200; page 11, lines 2-29; page 12, lines 1 - page 13, line 12; and page 18, lines 2-7).

Dependent Claim 4

To independent claim 1, claim 4 adds that the method further comprises receiving from the user, a specification of a relationship between two of the plurality of HMI screen nodes (see at least Fig. 3, activity 3200; page 12, line 1 – page 13, line 12).

Dependent Claim 5

To independent claim 1, claim 5 adds that the method further comprises receiving from the user a specification of an organization of the collection (see at least Fig. 3, activity 3200; page 12, line 1 – page 13, line 12).

Dependent Claim 6

To independent claim 1, claim 6 adds that the method further comprises receiving from the user a specification of a hierarchy of the collection (see at least Fig. 3, activity 3200; page 12, line 1 – page 13, line 12).

Dependent Claim 7

To independent claim 1, claim 7 adds that the method further comprises automatically determining an arrangement of the collection (see at least Fig. 3, activity 3300; page 3, lines 18-23; page 13, lines 14-29; and page 16, line 17 – page 17, line 7).

Dependent Claim 8

To independent claim 1, claim 8 adds that the method further comprises receiving from the user a specification of a size the plurality of HMI screen nodes (see at least Fig. 3, activity 3200; page 12, line 1 – page 13; line 12).

Dependent Claim 9

To independent claim 1, claim 9 adds that the method further comprises zooming a rendition of the plurality of HMI screen nodes (see at least page 14, lines 1-20; page 15, line 27 – page 16, line 6; and page 18, line 17 – page 19, line 2).

Dependent Claim 10

To independent claim 1, claim 10 adds that the method further comprises panning a rendition of the plurality of HMI screen nodes (see at least page 14, lines 10-20; page 15, line 27 – page 16, line 6; and page 18, line 17 – page 19, line 2).

Dependent Claim 11

To independent claim 1, claim 11 adds that the method further comprises collapsing a rendition of the plurality of HMI screen nodes (see at least page 14, lines 1-20; and page 18, line 17 – page 19, line 2).

Dependent Claim 12

To independent claim 1, claim 12 adds that the method further comprises expanding a rendition of the plurality of HMI screen nodes (see at least page 14, lines 1-20; and page 18, line 17 – page 19, line 2).

Dependent Claim 13

To independent claim 1, claim 6 adds that the method further comprises rotating a rendition of the plurality of HMI screen nodes (see at least page 14, lines 10-20; and page 15, line 27 – page 16, line 6).

Dependent Claim 14

To independent claim 1, claim 14 adds that the method further comprises rendering a portion of the plurality of HMI screen nodes (see at least Fig. 3, activity 3400; page 3, lines 16 and 21-22; page 6, line 9; page 14, lines 1-8; page 11, lines 20-30; and page 17, lines 2-4).

Dependent Claim 15

To independent claim 1, claim 15 adds that the method further comprises enabling the user to revise the collection (see at least page 11, line 20 – page 12, line 11; page 13, lines 1-29; and page 17, line 28 –page 18, line 7).

Dependent Claim 16

To independent claim 1, claim 16 adds that the method further comprises enabling the user to revise at least one of the plurality of HMI screen nodes (see at least page 11, line 20 – page 12, line 11; page 13, lines 1-29; and page 17, line 28 –page 18, line 7).

Dependent Claim 17

To independent claim 1, claim 17 adds that the method further comprises receiving a user specification of an attribute of an HMI screen node (see at least page 13, lines 6-12; and page 14, lines 1-8).

Dependent Claim 18

To independent claim 1, claim 18 adds that the method further comprises receiving a user specification of an attribute of the collection (see at least page 13, lines 6-12; and page 14, lines 1-8).

Dependent Claim 19

To independent claim 1, claim 19 adds that the method further comprises receiving from the user a specification of a link between two HMI screen nodes (see at least page 15, lines 16-25).

Dependent Claim 20

To independent claim 1, claim 20 adds that the method further comprises receiving from the user a specification of a link from a first HMI screen node to a second HMI screen node, the second HMI screen node non-familial to the first HMI screen node (see at least page 12, lines 13-30; page 14, lines 13-15; and page 15, lines 16-25).

Dependent Claim 21

To independent claim 1, claim 21 adds that the method further comprises rendering a link between two HMI screen nodes (see at least Fig. 3, activity 3400; page 3, lines 16 and 21-22; page 6, line 9; page 14, lines 1-8; page 11, lines 20-30; and page 17, lines 2-4).

Dependent Claim 22

To independent claim 1, claim 22 adds that the method further comprises rendering a link from a first HMI screen node to a second HMI screen node, the second HMI screen node non-familial to the first HMI screen node (see at least Fig. 3, activity 3400; page 3, lines 16 and 21-22; page 6, line 9; page 14, lines 1-8; page 11, lines 20-30; page 12, lines 13-30; page 14, lines 13-15; page 15, lines 16-25; and page 17, lines 2-4).

Dependent Claim 23

To independent claim 1, claim 23 adds that the method further comprises receiving from the user a specification of a navigation control comprising at least one HMI screen link (see at least page 12, lines 1-11; page 14, line 22 – page 16, line 12; and page 17, line 2 – page 18, line 7).

Dependent Claim 24

To independent claim 1, claim 24 adds that the method further comprises rendering a navigation control comprising at least one HMI screen link (see at least Fig. 3, activity 3400; page 3, lines 16 and 21-22; page 6, line 9; page 12, lines 1-11; page 14, line 1 – page 16, line 12; page 11, lines 20-30; and page 17, line 2 – page 18, line 7).

Dependent Claim 25

To independent claim 1, claim 25 adds that the method further comprises receiving from the user a specification of a navigation control comprising at least one button (see at least page 14, line 1 – page 16, line 12; and page 17, line 2 – page 18, line 7).

Dependent Claim 26

To independent claim 1, claim 26 adds that the method further comprises rendering a navigation control comprising at least one button (see at least Fig. 3, activity 3400; page 3, lines 16 and 21-22; page 6, line 9; page 14, lines 1-8; page 11, lines 20-30; page 14, line 1 – page 16, line 12; and page 17, line 2 – page 18, line 7).

Dependent Claim 27

To independent claim 1, claim 27 adds that the method further comprises receiving from the user a specification of a navigation control comprising at least one button, the at least one button comprising an HMI screen link (see at least page 3, lines 15-18; page 4, lines 23-25; and page 7, lines 12-17).

Dependent Claim 28

To independent claim 1, claim 28 adds that the method further comprises rendering a navigation control comprising at least one button, the at least one button comprising an HMI screen link (see at least Fig. 3, activity 3400; page 3, lines 15-18 and 21-22; page 4, lines 23-25; page 6, line 9; page 7, lines 12-17; page 14, lines 1-8; page 11, lines 20-30; and page 17, lines 2-4).

Dependent Claim 29

To independent claim 1, claim 29 adds that the method further comprises receiving from the user a specification of a navigation control comprising at least one button, the at least one button comprising an HMI screen link, the at least one button activatable via a user-specified soft key (see at least page 3, lines 15-18; page 4, lines 23-25; page 7, lines 12-17; and page 12, lines 13-30).

Dependent Claim 30

To independent claim 1, claim 30 adds that the method further comprises rendering a navigation control comprising at least one button, the at least one button comprising an HMI screen link, the at least one button activatable via a user-specified soft key (see at least Fig. 3, activity 3400; page 3, lines 15-18 and 21-22; page 4, lines 23-25; page 6, line 9; page 7, lines 12-17; page 12, lines 13-30; page 14, lines 1-8; page 11, lines 20-30; and page 17, lines 2-4).

Dependent Claim 31

To independent claim 1, claim 31 adds that the method further comprises receiving from the user a specification of a navigation control comprising at least one element activatable via a user-specified soft key (see at least page 3, lines 15-18; page 4, lines 23-25; page 7, lines 12-17; and page 12, lines 13-30).

Dependent Claim 32

To independent claim 1, claim 32 adds that the method further comprises rendering a navigation control comprising at least one element activatable via a user-specified soft key (see at least Fig.

3, activity 3400; page 3, lines 15-18 and 21-22; page 4, lines 23-25; page 6, line 9; page 7, lines 12-17; page 12, lines 13-30; page 14, lines 1-8; page 11, lines 20-30; and page 17, lines 2-4).

Independent Claim 33

Independent claim 33 recites a machine-readable medium (see at least Fig. 2, element 2300; page 7, lines 22-29; and page 8, lines 8-13). The machine-readable medium contains instructions for activities that comprise providing an HMI screen navigation editor to a user (see at least Fig. 3, activity 3100; page 3, lines 13-14; page 6, lines 6-7; and page 12, lines 1-11). The method further comprises via the HMI screen navigation editor, enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes (see at least Fig. 3, activity 3200; page 3, lines 14-16; page 6, lines 7-9; and page 12, lines 13-30). The activities further comprise responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes a determined collision with said child node (see at least page 16, line 17 – page 17, line 7). The activities further require that the determined collision is determined based upon said adjusted position of said parent node and a calculated position of said child node (see at least page 16, line 17 – page 17, line 7). The method further comprises rendering the collection to the user (see at least Fig. 3, activity 3400; page 3, lines 16 and 21-22; page 6, line 9; page 14, lines 1-8; page 11, lines 20-30; and page 17, lines 2-4).

Independent Claim 34

Independent claim 34 recites a device for providing a representation of user screens for an HMI (see at least Fig. 1, element 1170; page 3, lines 13-14; page 6, line 11 – page 7, line 20; and page 12, lines 1-11). The device comprises an HMI screen navigation editor (see at least page 3, lines 13-22). The HMI screen navigation editor is adapted to enable the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes (see at least page 3, lines 14-16; page 6, line 11 – page 7, line 20; and page 12, lines 13-30). The HMI

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screen navigation editor is adapted to responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjust a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes a determined collision with said child node (see at least page 16, line 17 – page 17, line 7). Claim 34 further requires that the determined collision is determined based upon said adjusted position of said parent node and a calculated position of said child node (see at least page 16, line 17 – page 17, line 7). The HMI screen navigation editor is adapted to render the collection to the user (see at least Fig. 3, activity 3400; page 3, lines 16 and 21-22; page 6, line 9; page 14, lines 1-8; page 11, lines 20-30; and page 17, lines 2-4).

Dependent Claim 35
To independent claim 1, claim 35 adds that the method further comprises receiving from the user, a user-drawn relationship indication line between two of the plurality of HMI screen nodes (see at least page 12, line 13 – page 13, line 12; and page 14, lines 1-8).

Dependent Claim 36
To independent claim 1, claim 36 adds that the method further comprises automatically determining an arrangement of the collection based upon a user specified upper limit on inter-generational spacing (see at least page 13, lines 6-29).

Dependent Claim 37
To independent claim 1, claim 32 adds that the method further comprises receiving a user specification of an attribute of an HMI screen node, the attribute adapted to change a background color of a screen (see at least page 10, line 24 – page 11, line 18; and page 14, lines 1-8).

Dependent Claim 38
To independent claim 1, claim 38 adds that the method further comprises rendering a navigation

control comprising a button adapted to display a previously viewed screen in a sequence of screens (see at least page 17, lines 9-26; and page 18, lines 17 – page 19, line 2).

Dependent Claim 39

To independent claim 1, claim 32 adds that the method further comprises rendering a navigation control comprising a button adapted to display a subsequent screen in a sequence of screens (see at least page 17, lines 9-26; and page 18, lines 17 – page 19, line 2).

Independent Claim 40

Independent claim 40 recites a method that comprises rendering a collection comprising a linked hierarchically organized plurality of HMI screen nodes to a user, said collection created via a provided HMI screen navigation editor (see at least Fig. 3, activity 3400; page 3, lines 16 and 21-22; page 6, line 9; page 14, lines 1-8; page 11, lines 20-30; and page 17, lines 2-4). The method further requires said HMI screen navigation editor adapted to, responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a child node of a plurality of child nodes of said parent node, automatically recursively adjust a position of said parent node until an adjusted position of said parent node does not create with respect to each child node of said plurality of child nodes, a determined collision with said child node (see at least page 16, line 17 – page 17, line 7). The method further requires that determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node (see at least page 16, line 17 – page 17, line 7).

Dependent Claim 41

To independent claim 40, claim 41 adds that the method further comprises automatically determining an arrangement of the collection based upon a user specified upper limit on inter-generational spacing between said parent node and said child node (see at least page 13, lines 6-29).

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VI.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Each of claims 1 - 40 was rejected under 35 U.S.C. 103(a) as being obvious, and thus unpatentable, over various combinations of U.S. Patent Application Publication 2003/0184580 ("Kodosky"), and/or U.S. Patent 5,870,559 ("Leshem"). Each of these rejections is respectfully traversed.

VII.   Argument

Each of Claims 1-41 is Statutory under 35 USC 101

A. Legal Standards

The statute of 35 U.S.C. 101 states, "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title".

A claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing. *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008) *(en banc) (citing, Gottschalk v. Benson*, 409 U.S. 63, 70 (1972)). The transformation of raw data into a particular visual depiction of a physical object on a display is sufficient to render that more narrowly-claimed process patent-eligible, the electronic transformation of the data itself into a visual depiction in Abele was sufficient; the claim was not required to involve any transformation of the underlying physical object that the data represented so long as the claimed process is limited to a practical application of a fundamental principle to transform specific data, and the claim is limited to a visual depiction that represents specific physical objects or substances. *In re Bilski,* 545 F.3d at 963.

According to MPEP 2106 IV.B.1.a, "a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory."

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This view is echoed by the Federal Circuit. An "invention includes 'any new and useful process, machine, manufacture or composition of matter.'" *Eolas Technologies Inc. v. Microsoft Corp.*, 399 F.3d 1325 (Fed. Cir. 2005) (citing 35 U.S.C. § 101 (2000)). "Without question, software code alone qualifies as an invention eligible for patenting under these categories, at least as processes." *Id. (citing In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994); *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999); MPEP § 2106.IV.B.1.a. (8th ed., rev. 2 2001)). "[S]oftware code claimed in conjunction with a physical structure, such as a disk, fits within at least those two categories of subject matter within the broad statutory label of 'patented invention.' *Id.*

B. Argument

· Each of independent claims 1 and 40, from one of which each of claims 2-32 and 35-39 ultimately depends states, *inter alia*, a "method" "comprising the activities of:" "rendering" a "collection to" a "user". Each of claims 1 and 40 require this collection to be "a collection comprising a linked hierarchically organized plurality of HMI screen nodes". The present application defines "HMI screen nodes" to be a miniaturized visual representation of a **visual display of a human machine interlace, used for monitoring, programming, and/or controlling automation machines and/or processes**, renderable via a monitor. See argument regarding obviousness rejections, *infra*. Thus, in each of independent claims 1 and 40, raw data is transformed into a particular visual depiction of a human machine interface, which is a physical object, on a display. Such a transformation satisfies the requirements of *In re Bilski*.

Independent claim 33 states, *inter alia*, a "machine-readable medium containing instructions for activities". Independent claim 33 claims a computer-readable medium encoded with a computer program, which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.

Independent claim 34 states, *inter alia*, a "device for providing a representation of user screens for an HMI", which is statutory as a machine under 35 USC 101.

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For at least these reasons, each of independent claims 1, 33, 34, and 40 is directed toward statutory subject matter under 35 USC 101. Also, each of claims 2-32, 35-39, and 41, each of which ultimately depends from one of independent claims 1 and 40 is also directed toward statutory subject matter under 35 USC 101.

The Rejections Under 35 U.S.C. 103(a)

C. Argument Election

Applicant elects to have each of claims 1 - 40 considered separately regarding the obviousness rejections.

D. Legal Standards

1. Overview of *Prima Facie* Criteria for an Obviousness Rejection

The Patent Act, namely, 35 U.S.C. 103, forbids issuance of a patent when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art."

Relatively recently, in *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 127 S. Ct. 1727, 2007 U.S. LEXIS 4745 (2007), the Supreme Court interpreted this law while highlighting the typical invention process. "**Inventions** usually rely upon building blocks long since uncovered, and claimed discoveries **almost necessarily will be combinations** of what, in some sense, is already known" (emphasis added). Yet, to properly apply §103, the Court recognized the need to filter, via obviousness analyses, true inventions from mere ordinary technological advances. "Granting patent protection to advances that **would occur in the ordinary course** without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility" (emphasis added).

In *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), the Supreme Court established factors regarding the factual inquiry required to establish obviousness. The factors include:

      1. determining the scope and contents of the prior art;

      2. ascertaining differences between the prior art and the claims at issue;

      3. resolving the level of ordinary skill in the pertinent art; and

      4. considering objective evidence indicating obviousness or nonobviousness.

Regarding proposed combinations of prior art, *KSR* clarified that the "[t]he question is not whether the combination was obvious to the patentee but whether the combination was obvious to a person with ordinary skill in the art". Thus, in determining obviousness, both *KSR* and *Graham* warned against a "temptation to read into the prior art the teachings of the invention in issue" and instruct to "'guard against slipping into the use of hindsight'".

KSR further warned, "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art". The Federal Circuit has held that "[w]hen there is a design need or market pressure to solve a problem", obviousness is not supported unless "a finite, and in the context of the art, small or easily traversed, number of options" "would convince an ordinarily skilled artisan of obviousness". *Ortho-McNeil Pharmaceutical Inc. v. Mylan Laboratories Inc.*, 520 F.3d 1358 (Fed. Cir. 2008).

To guard against hindsight, *KSR* explained the "import[ance]" of "identify[ing] **a reason that would have prompted** a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does**" (emphasis added). That is, "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some **articulated reasoning** with some rational underpinning to support the legal conclusion of obviousness" (*quoting In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006) (emphasis added). Thus, "[t]o facilitate review, this analysis should be made explicit".

Explaining the need for "**a reason that would have prompted a person of ordinary skill**", *KSR* further taught that "if a technique has been used to **improve** one device, and a person of ordinary skill in the art **would recognize** that it would improve similar devices in the

same way, using the technique is obvious unless its actual application is beyond his or her skill" (emphasis added). Further exploring this mandate, the Federal Circuit has recently recognized that "knowledge of a problem and motivation to solve it are entirely different from motivation to combine particular references". *Innogenetics v. Abbott Laboratories* (Fed. Cir. 2007-1145) (8 January 2008).

Thus, according to the Supreme Court, a proper obviousness rejection must "identify a **reason that would have prompted** a person of ordinary skill in the relevant field **to combine** the elements in the way the claimed new invention does" and must present substantial evidence that one of ordinary skill **WOULD** recognize that alleged reason for making the particular claimed combination. It follows that if the alleged reason for making the particular combination of features is not evidenced to be art-recognized, then that reason **MUST BE** based on hindsight.

In addition to establishing a proper reason to combine, a proper obviousness rejection must clearly identify proposed reference(s) that:

1. are pertinent;

2. provide a reasonable expectation of success; and

3. teach... all the claim limitations

See MPEP 2143; MPEP 2143.03, *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); and additional citations *infra*.

Consistent with other patentability rejections, to establish a *prima facie* case of obviousness, substantial evidence must be provided that fulfills the mandates of the applicable law. The "Patent Office has the initial duty of supplying the factual basis for its rejection." *In re Warner*, 379 F.2d 1011, 154 USPQ 173, 178 (CCPA 1967), *cert. denied*, 389 U.S. 1057, *reh'g denied*, 390 U.S. 1000 (1968). "It may not... resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis". *Id.*

It is legal error to "substitute[] supposed *per se* rules for the particularized inquiry required by section 103. It necessarily produces erroneous results." *See, In re Ochiai*, 71 F.3d 1565, 1571, 37 USPQ2d 1127, 1132-33 (Fed. Cir. 1998); *In re Wright*, 343 F.2d 761, 769-770, 145 USPQ 182, 190 (CCPA 1965).

"Once the examiner... carries the burden of making out a *prima facie* case of unpatentability, 'the burden of coming forward with evidence or argument shifts to the applicant.'" *In re Alton*, 76 F.3d 1168, 37 USPQ2d 1578 (Fed. Cir. 1996) *(quoting In re Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444).

2. Claim Construction

Before the *prima facie* obviousness criteria can be applied, the words of each claim must be interpreted. The Federal Circuit, in *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) *(en banc)*, *cert. denied*, 546 U.S. 1170, 126 S.Ct. 1332, 164 L.Ed.2d 49 (2006) clarified that:

1. "[t]he Patent and Trademark Office ('PTO') determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction **'in light of the specification as it would be interpreted by one of ordinary skill in the art'"** (*Id.* at 1316);

2. the words of a claim "are generally given their ordinary and customary meaning" (*Id.* at 1312);

3. the ordinary and customary meaning of a claim term is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application" (*Id.* at 1313);

4. "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but **in the context of the entire patent**, including the specification" (*Id.*);

5. even "the context in which a term is used in the asserted claim can be highly instructive" (*Id.* at 1314);

6. "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the **inventor's lexicography governs**" (*Id.* at 1316);

7. even "when guidance is not provided in explicit definitional format, **the specification may define claim terms by implication** such that the meaning may be found in or

ascertained by a reading of the patent documents" (*Id.* at 1321);

8. an "invention is construed not only in the light of the claims, but also with reference to the file wrapper or prosecution history in the Patent Office" (*Id.* at 1317 (*citing Graham v. John Deere Co.*, 383 U.S. 1, 33 (1966))); and

9. the "prosecution history… consists of the complete record of the proceedings before the PTO and **includes the prior art cited** during the examination of the patent" (*Id.* at 1317).

The rules established in *Phillips* apply to *ex parte* examination in the USPTO. *See, In re Kumar*, 418 F.2d 1361 (Fed. Cir. 2005).

3. Determination of the Level of Skill

Under Graham, the required "factual determinations underpinning the legal conclusion of obviousness include 1) the scope and content of the prior art, 2) the level of ordinary skill in the art, 3) the differences between the claimed invention and the prior art, and 4) evidence of secondary factors, also known as objective indicia of non-obviousness." *Eisai Co. Ltd. v. Dr. Reddy's Laboratories, Inc.*, 2008 WL 2791884 (Fed. Cir. 2008), *citing Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). "The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry." *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718, 21 USPQ2d 1053, 1057 (Fed. Cir. 1991). Thus, the "examiner must ascertain what would have been obvious to one of ordinary skill in the art at the time the invention was made, and 'not to the inventor, a judge, a layman, those skilled in remote arts, or to geniuses in the art at hand'." MPEP 2141.03, *quoting Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 218 USPQ 865 (Fed. Cir. 1983), *cert. denied*, 464 U.S. 1043 (1984).

4. All Words in a Claim Must Be Considered

"To establish *prima facie* obviousness…, '[a]ll words in a claim must be considered'". MPEP 2143.03, *quoting In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970); *see also, In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); *In re Wilder*, 429 F.2d 447, 166 USPQ 545, 548 (CCPA 1970); *In re Angstadt*, 537 F.2d 498, 190 USPQ 214, 217 (CCPA

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1976); *In re Geerdes*, 491 F.2d 1260, 180 USPQ 789, 791 (CCPA 1974).

5. Unfounded Assertions of Knowledge

Deficiencies of the cited references can not be remedied by general conclusions about what is basic knowledge or common sense to one of ordinary skill in the art. *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001). An assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.* That is, such unfounded assertions are not permissible substitutes for evidence. *See, In re Lee*, 277 F.3d 1338, 1435, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002).

E. Analysis

The Declaration

On 31 October 2007, a Declaration under 37 C.F.R. § 1.132 of Colleen Guy (an inventor of record of the present application and one skilled in the art of industrial computer applications engineering as of 24 March 2000, the priority date claimed by the present application) was entered into the record. The present Office Action fails to accord Ms. Guy's Declaration ("the Declaration") the evidentiary weight to which that Declaration is entitled. The present Office Action merely asserts, "it [the Declaration] fails to provide outweighing objective evidence." This assertion is baseless since the present Office Action offers no evidence whatsoever regarding how one having ordinary skill in the art would interpret the claimed subject matter of each of claims 1-40 and whether one having ordinary skill in the art would find that claimed subject matter obvious in view of the applied portions of the relied upon references. The utter lack of evidence of the present Office Action cannot outweigh the evidence of the Declaration.

The present Office Action mischaracterizes the content of Ms. Guy's Declaration, by asserting, at Page 3:

> [t]he evidence of the Affidavit consists substantially of statements expressing that:
> (1) one of ordinary skill in the art would not find the assertions of the Previous
> Office Action to be true; and (2) that on one of ordinary skill art would not
> understand the cited references' disclosures.

The evidence of the Affidavit as not provided any objective evidence of secondary considerations such as unexpected results, commercial success, long-felt need, failure of others, copying by others, licensing, or skepticism of experts. In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Instead of these mischaracterizations, the Declaration actually:

a.   evidences the qualifications of Ms. Guy (see, e.g., ¶ 12-14);

b.   evidences that Ms. Guy reviewed the documents at issue regarding the present application, was familiar with the subject matter of the documents at issue regarding the present application, and knew what one of ordinary skill in the art of the present application would have known on the priority date claimed by the present application (see, e.g., ¶ 5-11);

c.   cites claim language at issue (see, e.g., ¶ 12-13 and 27-28);

d.   references statements in the prior Office Action dated 22 August 2007 ("the prior Office Action") alleging that the applied portions of the relied-upon references teach the claimed subject matter at issue (see, e.g., ¶ 14, 29, and 35);

e.   evidences that one having ordinary skill in the art would have found the referenced statements of the prior Office Action factually incorrect as of the priority date claimed by the present application (see, e.g., ¶ 15, 30, and 36);

f.   evidences, based upon cited evidence, how one having ordinary skill in the art would construe the claimed subject matter of claims 1-40 (see, e.g., ¶ 17-18);

g.   cites evidence from the applied portions of the relied-upon references (see, e.g., ¶ 19-21 and 32);

  h. provides evidence indicating why the applied portions of the relied-upon references do not teach the claimed subject matter of claims 1-40 (see, e.g., ¶ 22-24, 31, 33-34, and 37-38); and

  i. evidences that the present Office Action is in error in asserting that the applied portions of the relied-upon references teach the claimed subject matter of claims 1-40 (see, e.g., ¶ 25-26 and 39-40).

  Since the Declaration provides persuasive evidence that the prior Office Action does not present a *prima facie* rejection of any of claims 1-40, no requirement exists that the Declaration address secondary considerations regarding patentability of the claimed subject matter. On 3 October 2008, an Advisory Action ("the Advisory Action") was issued regarding the present Application. The Advisory Action improperly relies upon a case, *In re De Blauwe*, 73 6 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984) that is inapposite to the posture of the present application. The Advisory Action contends that a Declaration must address secondary considerations of patentability in order to be considered. However, *In re De Blauwe* is easily distinguishable from the posture of the present application since a *prima facie* rejection of the claims at issue had been established in that case. Regarding the present application, the evidence of the Declaration of Colleen Guy demonstrates that no *prima facie* rejection has been established for any claim. Since no *prima facie* rejection of any claim has been presented, no requirement exists to address secondary consideration of patentability to rebut a *prima facie* rejection. Consequently, the failure of the present Office Action and the Advisory Action to properly consider the evidence of the Declaration of Colleen Guy lacks any legal basis whatsoever.

  The Advisory Action also mischaracterizes the Declaration of Colleen Guy by stating that the Declaration "consists substantially of statements expressing that: (1) one of ordinary skill in the art would not find the assertions of the Previous Office Action to be true; and (2) that on one of ordinary skill art would not understand the cited references' disclosures". This mischaracterization is traversed. The Declaration of Colleen Guy presents persuasive and uncontroverted evidence regarding how one having ordinary skill in the art would interpret the applied portions of the relied-upon references in rejecting claims 1-40. The present Office

Action and the Advisory Action fail to present any evidence whatsoever of how one having ordinary skill in the art would interpret claimed subject matter or the applied portions of the relied-upon references.

Claim Construction

The present application provides numerous explicit definitions of words and phrases that control examination of the claimed subject matter. For example, at paragraph 16, an "HMI screen node" is defined to be "a miniaturized visual representation of an HMI user screen". At paragraph 11 an "HMI user screen" is defined to be "a visual display of an HMI renderable via a monitor." At paragraph 10 an "HMI" is defined to be "a human machine interface used for monitoring, programming, and/or controlling automation machines and/or processes. An HMI can, for example, interpret communications from a human operator of an industrial plant to an automated machine controller, and vice versa." Thus, as defined by the present application, an **"HMI screen node" is a miniaturized visual representation of a visual display of a human machine interlace, used for monitoring, programming, and/or controlling automation machines and/or processes, renderable via a monitor.**

1. Claim 1

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

i. Missing Claim Limitations

Claim 1, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, in view of the explicit definition of the present application for the phrase "HMI screen node", "via the HMI screen navigation editor, enabling the user to create a collection comprising a **linked hierarchically organized plurality of HMI screen nodes.**" The present Office Action alleges, at page 5, that this claimed subject matter is taught by paragraphs 1 and 375 of Kodosky. Yet, the present Office Action presents no evidence that one having ordinary skill in the art would have found that these applied portions of

Kodosky teach anything whatsoever regarding "HMI screen nodes". By contrast, Applicant provided persuasive evidence, in the form of the Declaration of Colleen Guy, that the applied portions of Kodosky do not teach, "via the HMI screen navigation editor, enabling the user to create a collection comprising **a linked hierarchically organized plurality of HMI screen nodes**" (see Guy Declaration, paragraphs 12-26).

In view of the explicit definition of "HMI screen node" of the present application, the assertions of the Advisory Action demonstrate a profound misunderstanding of the claimed subject matter. The Advisory Action asserts at Page 4, "[e]ven if weight is given to the statement in paragraph 22, the evidence of record suggests to the contrary, 'The **device icons** preferably have an appearance which corresponds to the device they represent'". No evidence is of record that one having ordinary skill in the art would have interpreted "**device icons**" to teach an "HMI screen node", which the present application defines a miniaturized visual representation of a visual display of **a human machine interlace, used for monitoring, programming, and/or controlling automation machines and/or processes**, renderable via a monitor.

In addition, claim 1, states, *inter alia*, yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node". The present Office Action alleges, at page 5, that this claimed subject matter is taught by paragraphs 16 and 185 of Kodosky. Yet, the present Office Action presents no evidence that one having ordinary skill in the art would have found that these applied portions of Kodosky teach anything whatsoever regarding "adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes". By contrast, Applicant provided persuasive evidence, in the form of the Declaration of Colleen Guy, that the applied portions of Kodosky do not teach, "responsive to a detected collision between a parent

node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node" (see Guy Declaration, paragraphs 27-40).

The Advisory Action asserts that somehow "figure 17" of Kodosky overcomes the deficiencies of Kodosky cited by the present Office Action in rejecting claim 1. However, no evidence is of record that the user interface illustrated in figure 17 of Kodosky teaches anything whatsoever regarding any "detected collision", any "adjusting a position of a parent node" or any "adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes".

ii. Conclusion

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 1 is respectfully requested.

2. Claim 2

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 2, states, *inter alia*, yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving from the user a specification of **an HMI root screen node.**" Indeed, no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has

been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 2 is respectfully requested.

3. Claim 3

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 3, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving from the user a specification of **an HMI child screen node,** the HMI child screen node a descendent of **an HMI root screen node.**" Indeed, no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 3 is respectfully requested.

4. Claim 4

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 4, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving from the user, a specification of a relationship between two of the plurality of **HMI screen nodes**." Indeed, no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 4 is respectfully requested.

5. Claim 5

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 5, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving from the user a specification of an organization of the collection." Claim 1, from which claim 5 ultimately depends, requires the "collection" to comprise "a linked hierarchically organized plurality of HMI screen nodes". No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the

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Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 5 is respectfully requested.

6. Claim 6

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 6, states, *inter alia*, yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving from the user a specification of a hierarchy of the collection." Claim 1, from which claim 6 ultimately depends, requires the "collection" to comprise "a linked hierarchically organized plurality of HMI screen nodes". No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 6 is respectfully requested.

7. Claim 7

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 7 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "automatically determining an arrangement of the collection." Claim 1, from which claim 7 ultimately depends, requires the "collection" comprise "a linked hierarchically organized plurality of HMI screen nodes". No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 7 is respectfully requested.

8. Claim 8

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 8 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving from the user a specification of a size the plurality of **HMI screen nodes.**" No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 8 is respectfully requested.

9. Claim 9

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 9 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "zooming a rendition of the plurality of HMI screen nodes." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 9 is respectfully requested.

10. Claim 10

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 10 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "panning a rendition of the plurality of HMI screen nodes." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 10 is respectfully requested.

11. Claim 11

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 11 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "collapsing a rendition of the plurality of HMI screen nodes." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the

Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 11 is respectfully requested.

12. Claim 12

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 12 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "expanding a rendition of the plurality of HMI screen nodes." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 12 is respectfully requested.

13. Claim 13

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 13 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "rotating a rendition of the plurality of HMI screen nodes." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 13 is respectfully requested.

14. Claim 14

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 14 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "rendering a portion of the plurality of HMI screen nodes." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as

attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 14 is respectfully requested.

15. Claim 15

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 15, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "enabling the user to revise the collection." Claim 1, from which claim 15 ultimately depends, requires the "collection" comprise "a linked hierarchically organized plurality of HMI screen nodes". No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 15 is respectfully requested.

16. Claim 16

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

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Claim 16 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "enabling the user to revise at least one of the plurality of HMI screen nodes." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 16 is respectfully requested.

17. Claim 17

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 17 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving a user specification of an attribute of an HMI screen node." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as

attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 17 is respectfully requested.

18. Claim 18

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 18, states, *inter alia*, yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving a user specification of an attribute of the collection." Claim 1, from which claim 18 ultimately depends, requires the "collection" to comprise "a linked hierarchically organized plurality of HMI screen nodes". No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 18 is respectfully requested.

19. Claim 19

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 19 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving from the user a specification of a link between two HMI screen nodes." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 19 is respectfully requested.

20. Claim 20

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 20 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving from the user a specification of a link from a first HMI screen node to a second HMI screen node, the second HMI screen node non-familial to the first HMI screen node." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as

attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 20 is respectfully requested.

21. Claim 21

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 21 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "rendering a link between two HMI screen nodes." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 21 is respectfully requested.

22. Claim 22

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 22 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "rendering a link from a first HMI screen node to a second HMI screen node, the second HMI screen node non-familial to the first HMI

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screen node." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 22 is respectfully requested.

23. Claim 23

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 23 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 23. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 23 is respectfully requested.

24. Claim 24

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 24 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 24. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 24 is respectfully requested.

25. Claim 25

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 25 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 25. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 25 is respectfully requested.

26. Claim 26

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 26 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 26. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 26 is respectfully requested.

27. Claim 27

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 27 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 27. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 27 is respectfully requested.

28. Claim 28

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 28 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 28. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 28 is respectfully requested.

29. Claim 29

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 29 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 29. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 29 is respectfully requested.

30. Claim 30

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 30 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 30. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 30 is respectfully requested.

31. Claim 31

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 31 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 31. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 31 is respectfully requested.

32. Claim 32

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 32 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 32. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 32 is respectfully requested.

33. Claim 33

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

i. Missing Claim Limitations

Claim 33, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, in view of the explicit definition of the present application for the phrase "HMI screen node", "via the I-IMI screen navigation editor, enabling the user to create a collection comprising **a linked hierarchically organized plurality of HMI screen nodes**." The present Office Action alleges, at page 5, that this claimed subject matter is taught by paragraphs 1 and 375 of Kodosky. Yet, the present Office Action presents no evidence that one having ordinary skill in the art would have found that these applied portions of Kodosky teach anything whatsoever regarding "HMI screen nodes". By contrast, Applicant provided persuasive evidence, in the form of the Declaration of Colleen Guy, that the applied portions of Kodosky do not teach, "via the I-IMI screen navigation editor, enabling the user to create a collection comprising **a linked hierarchically organized plurality of HMI screen nodes**" (see Guy Declaration, paragraphs 12-26).

In view of the explicit definition of "HMI screen node" of the present application, the assertions of the Advisory Action demonstrate a profound misunderstanding of the claimed subject matter. The Advisory Action asserts at Page 4, "[e]ven if weight is given to the statement in paragraph 22, the evidence of record suggests to the contrary, 'The **device icons** preferably have an appearance which corresponds to the device they represent'". No evidence is of record that one having ordinary skill in the art would have interpreted "**device icons**" to teach an "HMI screen node", which the present application defines a miniaturized visual representation of a visual display of **a human machine interlace, used for monitoring, programming, and/or controlling automation machines and/or processes**, renderable via a monitor.

In addition, claim 33, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, in view of the explicit definition of the present application for the phrase "HMI screen node", "responsive to a detected

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collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node". The present Office Action alleges, at page 5, that this claimed subject matter is taught by paragraphs 16 and 185 of Kodosky. Yet, the present Office Action presents no evidence that one having ordinary skill in the art would have found that these applied portions of Kodosky teach anything whatsoever regarding "adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes". By contrast, Applicant provided persuasive evidence, in the form of the Declaration of Colleen Guy, that the applied portions of Kodosky do not teach, "responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node" (see Guy Declaration, paragraphs 27-40).

ii. Conclusion

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 33 is respectfully requested.

34. Claim 34

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

i. Missing Claim Limitations

Claim 34, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, in view of the explicit definition of the present application for the phrase "HMI screen node", "via the I-IMI screen navigation editor, enabling the user to create a collection comprising **a linked hierarchically organized plurality of HMI screen nodes.**" The present Office Action alleges, at page 5, that this claimed subject matter is taught by paragraphs 1 and 375 of Kodosky. Yet, the present Office Action presents no evidence that one having ordinary skill in the art would have found that these applied portions of Kodosky teach anything whatsoever regarding "HMI screen nodes". By contrast, Applicant provided persuasive evidence, in the form of the Declaration of Colleen Guy, that the applied portions of Kodosky do not teach, "via the I-IMI screen navigation editor, enabling the user to create a collection comprising **a linked hierarchically organized plurality of HMI screen nodes**" (see Guy Declaration, paragraphs 12-26).

In view of the explicit definition of "HMI screen node" of the present application, the assertions of the Advisory Action demonstrate a profound misunderstanding of the claimed subject matter. The Advisory Action asserts at Page 4, "[e]ven if weight is given to the statement in paragraph 22, the evidence of record suggests to the contrary, 'The **device icons** preferably have an appearance which corresponds to the device they represent'". No evidence is of record that one having ordinary skill in the art would have interpreted "**device icons**" to teach an "HMI screen node", which the present application defines a miniaturized visual representation of a visual display of **a human machine interlace, used for monitoring, programming, and/or controlling automation machines and/or processes,** renderable via a monitor.

In addition, claim 34, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, in view of the explicit definition of the present application for the phrase "HMI screen node", "responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined

collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node". The present Office Action alleges, at page 5, that this claimed subject matter is taught by paragraphs 16 and 185 of Kodosky. Yet, the present Office Action presents no evidence that one having ordinary skill in the art would have found that these applied portions of Kodosky teach anything whatsoever regarding "adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes". By contrast, Applicant provided persuasive evidence, in the form of the Declaration of Colleen Guy, that the applied portions of Kodosky do not teach, "responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node · of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node" (see Guy Declaration, paragraphs 27-40).

ii. Conclusion

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 34 is respectfully requested.

35. Claim 35

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 35 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving from the user, a user-drawn relationship indication line between two of the plurality of **HMI screen nodes.**" No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 35 is respectfully requested.

36. Claim 36

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 36 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 36. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 36 is respectfully requested.

37. Claim 37

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 37 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "receiving a user specification of an attribute of **an HMI screen node**, the attribute adapted to change a background color of a screen." No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the

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Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 37 is respectfully requested.

38. Claim 38

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 38 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 38. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 38 is respectfully requested.

39. Claim 39

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness. Since claim 39 ultimately depends from claim 1, the reasons for reversing the rejection of claim 1 apply to claim 39. Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 39 is respectfully requested.

40. Claim 40

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

i. Missing Claim Limitations

Claim 40, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, in view of the explicit definition of the present application for the phrase "HMI screen node", "rendering a collection comprising a

linked hierarchically organized plurality of HMI screen nodes to a user, said collection created via a provided HMI screen navigation editor." The present Office Action alleges, at page 5, that this claimed subject matter is taught by paragraphs 1 and 375 of Kodosky. Yet, the present Office Action presents no evidence that one having ordinary skill in the art would have found that these applied portions of Kodosky teach anything whatsoever regarding "HMI screen nodes". By contrast, Applicant provided persuasive evidence, in the form of the Declaration of Colleen Guy, that the applied portions of Kodosky do not teach, "rendering a collection comprising a linked hierarchically organized plurality of HMI screen nodes to a user, said collection created via a provided HMI screen navigation editor" (see Guy Declaration, paragraphs 12-26).

In view of the explicit definition of "HMI screen node" of the present application, the assertions of the Advisory Action demonstrate a profound misunderstanding of the claimed subject matter. The Advisory Action asserts at Page 4, "[e]ven if weight is given to the statement in paragraph 22, the evidence of record suggests to the contrary, 'The **device icons** preferably have an appearance which corresponds to the device they represent'". No evidence is of record that one having ordinary skill in the art would have interpreted "**device icons**" to teach an "HMI screen node", which the present application defines a miniaturized visual representation of a visual display of **a human machine interlace, used for monitoring, programming, and/or controlling automation machines and/or processes**, renderable via a monitor.

In addition, claim 40, states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, in view of the explicit definition of the present application for the phrase "HMI screen node", "said HMI screen navigation editor adapted to, responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a child node of a plurality of child nodes of said parent node, automatically recursively adjust a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node". The present Office Action alleges, at page 5, that this claimed subject matter is taught by paragraphs 16 and 185 of Kodosky. Yet, the present Office Action presents no evidence that one having ordinary skill in

the art would have found that these applied portions of Kodosky teach anything whatsoever regarding "adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes". By contrast, Applicant provided persuasive evidence, in the form of the Declaration of Colleen Guy, that the applied portions of Kodosky do not teach, "said HMI screen navigation editor adapted to, responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a child node of a plurality of child nodes of said parent node, automatically recursively adjust a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node" (see Guy Declaration, paragraphs 27-40).

ii. Conclusion

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 40 is respectfully requested.

41. Claim 41

None of the applied portions of the references relied upon in the Office Action, whether considered alone or in combination, establishes a *prima facie* case of obviousness.

Claim 41 states, *inter alia,* yet no evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, "automatically determining an arrangement of the collection based upon a user specified upper limit on inter-generational spacing between said parent node and said child node." Claim 40, from which claim 41 ultimately depends, requires that the "parent node" and the "child node" are from "a linked hierarchically organized plurality of **HMI screen nodes**". No evidence is of record that the applied portions of the relied-upon references teach, alone or in combination, anything regarding an HMI screen node as that phrase has been defined in the present application.

Thus, even if there were proper evidence of obviousness presented in the Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the

Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the claims, and consequently the Office Action fails to establish a *prima facie* case of obviousness.

Accordingly, for at least the reasons mentioned above, a reversal of the rejection of claim 41 is respectfully requested.

VIII.   CLAIMS APPENDIX

The claims appendix sets forth all pending claims in the state in which they were appealed.

IX.   EVIDENCE APPENDIX

The evidence appendix sets forth copies of any evidence submitted pursuant to 37 C.F.R. § 1.130, 37 C.F.R. § 1.131, or 37 C.F.R. § 1.132 or of any other evidence entered by the examiner and relied upon by appellant in the appeal, along with a statement setting forth where in the record that evidence was entered in the record by the examiner.

X.   RELATED PROCEEDINGS APPENDIX

The related proceedings appendix sets forth copies of decisions rendered by a court or the Board in any proceeding identified pursuant to 37 C.F.R. § 41.37(c)(1)(ii).

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SUMMARY

In view of the above, Appellant submits that all claims on appeal distinguish over the applied art and respectfully requests that the rejections of these claims should be reversed.

Appellant therefore respectfully requests that the Board of Patent Appeals and Interferences reverse the decision rejecting claims 1-41 and direct that the application be passed to issue.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. 1.16 or 1.17 to Deposit Account No. 50-2504. The Examiner is invited to contact the undersigned at 434-972-9988 to discuss any matter regarding this application.

Respectfully submitted,

Michael Haynes PLC

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	**Poerner, Colleen**
Application	**10/666,227**
Confirmation	**8462**
Filed	**18 September 2003**
Application Title	**System and Method for Navigating an HMI**
Art Unit	**2178**
Latest Examiner	**Termanini, Samir**

Mail Stop Appeal Brief-Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

CLAIMS APPENDIX

1.   A method comprising the activities of:

      providing an HMI screen navigation editor to a user;

      via the HMI screen navigation editor, enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes;

      responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node; and

      rendering the collection to the user.

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2.   The method of claim 1, further comprising:
      receiving from the user a specification of an HMI root screen node.

3.   The method of claim 1, further comprising:
      receiving from the user a specification of an HMI child screen node, the HMI child screen node a descendent of an HMI root screen node.

4.   The method of claim 1, further comprising:
      receiving from the user, a specification of a relationship between two of the plurality of HMI screen nodes.

5.   The method of claim 1, further comprising:
      receiving from the user a specification of an organization of the collection.

6.   The method of claim 1, further comprising:
      receiving from the user a specification of a hierarchy of the collection.

7.   The method of claim 1, further comprising:
      automatically determining an arrangement of the collection.

8.   The method of claim 1, further comprising:
      receiving from the user a specification of a size the plurality of HMI screen nodes.

9.   The method of claim 1, further comprising:
      zooming a rendition of the plurality of HMI screen nodes.

10.   The method of claim 1, further comprising:
      panning a rendition of the plurality of HMI screen nodes.

11.   The method of claim 1, further comprising:

       collapsing a rendition of the plurality of HMI screen nodes.

12.   The method of claim 1, further comprising:

       expanding a rendition of the plurality of HMI screen nodes.

13.   The method of claim 1, further comprising:

       rotating a rendition of the plurality of HMI screen nodes.

14.   The method of claim 1, further comprising:

       rendering a portion of the plurality of HMI screen nodes.

15.   The method of claim 1, further comprising:

       enabling the user to revise the collection.

16.   The method of claim 1, further comprising:

       enabling the user to revise at least one of the plurality of HMI screen nodes.

17.   The method of claim 1, further comprising:

       receiving a user specification of an attribute of an HMI screen node.

18.   The method of claim 1, further comprising:

       receiving a user specification of an attribute of the collection.

19.   The method of claim 1, further comprising:

       receiving from the user a specification of a link between two HMI screen nodes.

20.   The method of claim 1, further comprising:

       receiving from the user a specification of a link from a first HMI screen node to a

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second HMI screen node, the second HMI screen node non-familial to the first HMI screen node.

21.   The method of claim 1, further comprising:

rendering a link between two HMI screen nodes;

22.   The method of claim 1, further comprising:

rendering a link from a first HMI screen node to a second HMI screen node, the second HMI screen node non-familial to the first HMI screen node.

23.   The method of claim 1, further comprising:

receiving from the user a specification of a navigation control comprising at least one HMI screen link.

24.   The method of claim 1, further comprising:

rendering a navigation control comprising at least one HMI screen link.

25.   The method of claim 1, further comprising:

receiving from the user a specification of a navigation control comprising at least one button.

26.   The method of claim 1, further comprising:

rendering a navigation control comprising at least one button.

27.   The method of claim 1, further comprising:

receiving from the user a specification of a navigation control comprising at least one button, the at least one button comprising an HMI screen link.

28.   The method of claim 1, further comprising:

            rendering a navigation control comprising at least one button, the at least one
button comprising an HMI screen link.

29.   The method of claim 1, further comprising:

            receiving from the user a specification of a navigation control comprising at least
one button, the at least one button comprising an HMI screen link, the at least one button
activatable via a user-specified soft key.

30.   The method of claim 1, further comprising:

            rendering a navigation control comprising at least one button, the at least one
button comprising an HMI screen link, the at least one button activatable via a user-
specified soft key.

31.   The method of claim 1, further comprising:

            receiving from the user a specification of a navigation control comprising at least
one element activatable via a user-specified soft key.

32.   The method of claim 1, further comprising:

            rendering a navigation control comprising at least one element activatable via a
user-specified soft key.

33.   A machine-readable medium containing instructions for activities comprising:

            providing an HMI screen navigation editor to a user;

            via the HMI screen navigation editor, enabling the user to create a collection
comprising a linked hierarchically organized plurality of HMI screen nodes;

            responsive to a detected collision between a parent node of said linked
hierarchically organized plurality of HMI screen nodes and a first child node of a
plurality of child nodes of said parent node, automatically recursively adjusting a position

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of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node; and

      rendering the collection to the user.

34.   A device for providing a representation of user screens for an HMI comprising:

      an HMI screen navigation editor operatively adapted to:

      enable a user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes;

      responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjust a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node; and

      render the collection to the user.

35.   The method of claim 1, further comprising:

      receiving from the user, a user-drawn relationship indication line between two of the plurality of HMI screen nodes.

36.   The method of claim 1, further comprising:

      automatically determining an arrangement of the collection based upon a user specified upper limit on inter-generational spacing.

37.   The method of claim 1, further comprising:

      receiving a user specification of an attribute of an HMI screen node, the attribute

adapted to change a background color of a screen.

38.   The method of claim 1, further comprising:

        rendering a navigation control comprising a button adapted to display a
previously viewed screen in a sequence of screens.

39.   The method of claim 1, further comprising:

        rendering a navigation control comprising a button adapted to display a
subsequent screen in a sequence of screens.

40.   A method for configuring HMI user screen navigation comprising the activities of:

        rendering a collection comprising a linked hierarchically organized plurality of
HMI screen nodes to a user, said collection created via a provided HMI screen navigation
editor, said HMI screen navigation editor adapted to, responsive to a detected collision
between a parent node of said linked hierarchically organized plurality of HMI screen
nodes and a child node of a plurality of child nodes of said parent node, automatically
recursively adjust a position of said parent node until an adjusted position of said parent
node does not create, with respect to each child node of said plurality of child nodes, a
determined collision with said child node, said determined collision determined based
upon said adjusted position of said parent node and a calculated position of said child
node.

41.   The method of claim 40 further comprising:

        automatically determining an arrangement of the collection based upon a user
specified upper limit on inter-generational spacing between said parent node and said
child node.

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PATENT

.Application 10/666,227

Attorney Docket 2002P15657US01 (1009-040)
</div>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	**Poerner, Colleen**
Application	**10/666,227**
Confirmation	**8462**
Filed	**18 September 2003**
Application Title	**System and Method for Navigating an HMI**
Art Unit	**2178**
Latest Examiner	**Termanini, Samir**

Mail Stop Appeal Brief-Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

EVIDENCE APPENDIX

Filed herewith is a copy of a Declaration of Colleen Guy (an inventor of record of the present application and one skilled in the art of industrial computer applications engineering as of 24 March 2000, the priority date claimed by the present application) that was submitted pursuant to 37 CFR 1.132.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	:	Poerner, Colleen
Application #	:	10/666,227
Confirmation #	:	8462
Filed	:	18 September 2003
Application Title	:	System and Method for Navigating an HMI
Art Unit #	:	2178
Latest Examiner	:	Termanini, Samir

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.132

Sir:

I, Colleen Guy, a citizen of the United States, whose full post office address is 47 Nottingham Way, Somerset, NJ 08877 declare as follows under penalty of perjury.

Background

1. I hold a bachelors degree in Computer Science from University of Hartford awarded in 2000.

2. I am currently a Software Engineer with Siemens Corporate Research.

3. Since 2001, I have worked continually in the field of automation applications with particular emphasis in industrial computer applications.

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4. During my career, I have been granted zero U.S. patents for my own inventions in the field of industrial computer applications engineering.

Review

5. I have reviewed Application Serial No. 10/666,227 (hereinafter the present application).

6. I know what one of ordinary skill in the art of the present application would have known on the priority date claimed by the present application (23 September 2002).

7. I have reviewed the USPTO Office Action dated 22 August 2007 (hereinafter the "Office Action") regarding Application Serial No. 10/666,227.

8. I have reviewed U.S. Patent Publication 2003/0184580 ("Kodosky").

9. I have reviewed U.S. Patent 5,870,559 ("Leshem").

10. Among the subject matter with which I was familiar prior to 23 September 2002 was subject matter of the type recited in Kodosky.

11. Among the subject matter with which I was familiar prior to 23 September 2002 was subject matter of the type recited in Leshem.

Kodosky Does Not Teach Claimed Subject Matter As Asserted

12. Each of independent claims 1 and 33, from one of which each of claims 2-32 and 35-39 ultimately depends, states, *inter alia*, "via the HMI screen navigation editor, enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes".

13. Independent claim 34 of the present application states, *inter alia*, "an HMI screen navigation editor operatively adapted to: enable a user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes".

14. The Office Action asserts, at Page 4, that the claimed subject matter stated in each of paragraphs 12-13 is taught by Kodosky at paragraphs 1 and 375.

15. One skilled in the art would find the assertions of the Office Action referenced in

Page 2 of 8

paragraph 14 factually incorrect as of 23 September 2002.

16. One skilled in the art would have noted the definition at paragraph 16 of the present application, which indicates that an "HMI screen node" is defined to be "a miniaturized visual representation of an HMI user screen."

17. One skilled in the art would have noted the definition at paragraph 11 of the present application, which indicates that an "HMI user screen" is defined to be "a visual display of an HMI renderable via a monitor."

18. One skilled in the art would have noted the definition at paragraph 10 of the present application, which indicates that an "HMI" is defined to be "a human machine interface used for monitoring, programming, and/or controlling automation machines and/or processes. An HMI can, for example, interpret communications from a human operator of an industrial plant to an automated machine controller, and vice versa."

19. One skilled in the art would have found that paragraph 1 of Kodosky states, "[t]he present invention relates to the fields of system design and distributed software programming and deployment, and more particularly to a system and method for enabling a user to more easily specify or create distributed systems and/or applications utilizing a configuration diagram. The present invention further relates to techniques for graphically distributing or deploying programs among a plurality of different devices or nodes in a distributed system."

20. One skilled in the art would not have found that paragraph 1 of Kodosky teaches anything regarding "a linked hierarchically organized plurality of HMI screen nodes" since "HMI screen nodes" are "a miniaturized visual representation of an HMI user screen".

21. One skilled in the art would have found that paragraph 375 of Kodosky states, "[a]s described above, the block diagram may automatically be displayed in response to an association performed by the user in step 644. In other words, the user may drag and drop a device icon onto a program icon in the configuration diagram. Where the program icon represents a graphical program, this may cause the block diagram

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corresponding to the program icon to be automatically displayed. The device icon may then automatically appear in the block diagram for further navigation or positioning by the user."

22. One skilled in the art would not have considered a "program icon" as described in paragraph 375 of Kodosky to be an "HMI screen node", which is "a miniaturized visual representation of an HMI user screen".

23. One skilled in the art would not have found that paragraph 375 of Kodosky teaches anything regarding "a linked hierarchically organized plurality of HMI screen nodes" since "HMI screen nodes" are "a miniaturized visual representation of an HMI user screen".

24. The applied portions of the remaining relied-upon references do not overcome at least these deficiencies of Kodosky.

25. Thus, one skilled in the art would not have found that the applied portions of the relied-upon references teach, "via the HMI screen navigation editor, enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes" as claimed in each of claims 1 and 33.

26. One skilled in the art would not have found that the applied portions of the relied-upon references teach, "an HMI screen navigation editor operatively adapted to: enable a user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes" as claimed in claim 34.

Kodosky and/or Leshem Do Not Teach Claimed Subject Matter As Asserted

27. Each of independent claims 1 and 33, from one of which each of claims 2-32 and 35-39 ultimately depends, states, *inter alia*, "responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child

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nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node".

28. Independent claim 34 of the present application states, *inter alia*, "an HMI screen navigation editor operatively adapted to: responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjust a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node".

29. The Office Action asserts, at Page 4, that Kodosky at paragraph 185 teaches "responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node ('...The 'drag and drop' method may comprise the user selecting the first program icon with a pointing device (e.g., a mouse) and dragging the first program icon on the display to be on top of or proximate to the first device icon....,' para. [0185]) automatically adjusting a nodes position ('...The connections between device icons that are automatically displayed may be displayed with an appearance indicating the type of detected connection....,' para. [0016])."

30. One skilled in the art would find the statement of the Office Action recited in paragraph 29 factually incorrect as of 23 September 2002.

31. One skilled in the art would not have equated either a "program icon" or a "device icon" as taught by Kodosky to be an "HMI screen node" in view of the definitions indicated in paragraphs 16-18.

32. In addition, one skilled in the art would have found that paragraph 16 of Kodosky states, "[i]n one embodiment, the configuration diagram may at least partly be

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automatically or programmatically created by the computer system based on an automatic detection of devices, programs, and/or other elements resident in the system. For example, Plug & Play software or other detection software may detect devices present in the system, their interconnections or couplings, information associated with the various devices, and programs resident in the various devices, and automatically display a portion or all of a configuration diagram. For example, the computer system may perform an automatic detection and automatically display device icons corresponding to detected devices and connections (e.g., 'connection icons' or 'wires') between respective device icons corresponding to the couplings between devices automatically detected in the system. The connections between device icons that are automatically displayed may be displayed with an appearance indicating the type of detected connection. The detection software may also automatically detect programs present in the system and display corresponding program icons. In a similar manner, software may also detect the relationship (e.g., invocation relationship) among programs resident in the various devices in the system and automatically display connections between the program icons to visually indicate the determined relationship. Detection software may also detect other elements in the system (e.g., data points, I/O channels) and display corresponding icons in the configuration diagram.

33. One skilled in the art would not have found paragraph 16 of Kodosky to teach any action that is "responsive to a detected collision" of anything whatsoever.

34. In addition, one skilled in the art would not have equated "programs" as taught by Kodosky to an "HMI screen node" in view of the definitions indicated in paragraphs 16-18.

35. The Office Action asserts, at Pages 5 and 6, that "*Leshem* disclose automatically recursively adjusting a position of a parent node with respect to its children; A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes

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(represented as respective icons within the map) on the display screen such that children nodes are positioned around and connected to their respective immediate parents. (This layout method can also be used to display other types of hierarchical data structures, such as the tree structure of a conventional file system.) The result is a map which comprises a hierarchical arrangement of parentchild child node (icon) clusters in which parent-child relationships are immediately apparent. Column 2, at lines 35-46. It is important to note that, '...This process is repeated for each parent node...' (Column 13, at lines 44-45) as it 'recursively positions the nodes on the display screen' (Column 13, at lines 65-67)."

36. One skilled in the art would find the statements of the Office Action recited in paragraph 35 factually incorrect as of 23 September 2002.

37. One skilled in the art would have found that, regarding the disclosed "nodes", Leshem states, at col. 2, lines 30-35, "[t]o generate the site map, a structural representation of the Web site (specifying the actual arrangement of content objects and links) is initially reduced, for purposes of generating the site map, to a hierarchical tree representation in which each content object of the Web site is represented as a node of the tree."

38. One skilled in the art would not have equated an "HMI screen node" to a "content object" of a "Web site" in view of the definitions indicated in paragraphs 16-18.

39. Thus, one skilled in the art would not have found that the applied portions of the relied-upon references teach, "responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjusting a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node" as claimed in each of claims 1 and 33.

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40. One skilled in the art would not have found that the applied portions of the relied-upon references teach, "an HMI screen navigation editor operatively adapted to: responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and a first child node of a plurality of child nodes of said parent node, automatically recursively adjust a position of said parent node until an adjusted position of said parent node does not create, with respect to each child node of said plurality of child nodes, a determined collision with said child node, said determined collision determined based upon said adjusted position of said parent node and a calculated position of said child node" as claimed in claim 34.

I further declare that all statements made herein of my own knowledge are true and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed this 30th day of October 2007   _Colleen K. Guy_
                                                           Colleen Guy

PATENT

Application 10/666,227

Attorney Docket 2002P15657US01 (1009-040)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	**Poerner, Colleen**
Application	**10/666,227**
Confirmation	**8462**
Filed	**18 September 2003**
Application Title	**System and Method for Navigating an HMI**
Art Unit	**2178**
Latest Examiner	**Termanini, Samir**

Mail Stop Appeal Brief-Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

RELATED PROCEEDINGS APPENDIX

There are no decisions in any related proceedings.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).	Complete if Known	
FEE TRANSMITTAL **For FY 2008**	Application Number	10/666,227
	Filing Date	18 September 2003
	First Named Inventor	Poerner, Colleen
☐ Applicant claims small entity status. See 37 CFR 1.27	Examiner Name	Termanini, Samir
	Art Unit	2178
TOTAL AMOUNT OF PAYMENT (\$) **540.00**	Attorney Docket No.	2002P15657US01 (1009-040)

METHOD OF PAYMENT (check all that apply)

☐ Check ☑ Credit Card ☐ Money Order ☐ None ☐ Other (please identify):

☑ Deposit Account   Deposit Account Number: 50-2504   Deposit Account Name: Michael N. Haynes

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below   ☐ Charge fee(s) indicated below, except for the filing fee

☑ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17   ☑ Credit any overpayments

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES Fee (\$)	FILING FEES Small Entity Fee (\$)	SEARCH FEES Fee (\$)	SEARCH FEES Small Entity Fee (\$)	EXAMINATION FEES Fee (\$)	EXAMINATION FEES Small Entity Fee (\$)	Fees Paid (\$)
Utility	310	155	510	255	210	105	....
Design	210	105	100	50	130	65	....
Plant	210	105	310	155	160	80	....
Reissue	310	155	510	255	620	310	....
Provisional	210	105	0	0	0	0	..

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	210	105
Multiple dependent claims	370	185

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims Fee (\$)	Fee Paid (\$)
_____ - 20 or HP =	0	x 52 =	0		0

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
_____ - 3 or HP =	0	x 220 =	0

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$260 (\$130 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____ - 100 =	_____ / 50 =	0 (round up to a whole number) x	270 =	0

4. OTHER FEE(S)

	Fees Paid (\$)
Non-English Specification, \$130 fee (no small entity discount)	0
Other (e.g., late filing surcharge): Filing a Brief in Support of an Appeal	540

SUBMITTED BY		
Signature	*Michael N. Haynes*	Registration No. (Attorney/Agent)
Name (Print/Type)		Date 23 Dec 2008

| | Telephone | |

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.